

CBRN Standard Development

Jonathan Szalajda
NIOSH/NPPTL Public Meeting
Hilton Garden Inn, Canonsburg, Pa

CBRN Standard Development Standard Development Schedule

- PAPRs
- Integrated SCBA/PAPR
- Integrated SCBA/APR
- Closed-circuit SCBA
- Supplied Air Respirators

CBRN Standard Development

CBRN APR Retrofit

- CBRN APR Retrofit Concept to be introduced on NIOSH/NPPTL Web Site by May 31, 2004
- CBRN APR Retrofit Concept protocols will be similar to those of the CBRN SCBA

CBRN Standard Development

CBRN APR Retrofit

- Retrofit capability limited to the facepiece of an approved CBRN APR
- Limited to facepieces in service less than 5 years
- Retrofit performed by manufacturer qualified technician
- Limited to design configurations of an approved CBRN APR

CBRN PAPR Standard Development

Performance Based CBRN PAPR Concept

- **Flow**
 - Testing via use of Breathing Machines
 - Constant Flow and Pressure Demand
- **Filter Capacity**
 - Tested at Flow Rate Determined by PAPR Blower
- **Particulate Efficiency**
 - 99.97% Tested at Flow Rate or Velocity Determined by PAPR Blower
- **Hazard Protection**
 - Minimum CBRN APR Range (CWAs, TICs & Particulate)
 - Possible Stacking Protections

CBRN PAPR Standard Development

Future Considerations for Respirator Certification

Application Content

- Unique Labeling Requirements
 - **Stacking Provisions**
 - **Component labeling**
- Quality Control Plan
 - **Canister Uniformity**
 - **Manifold Airflow Uniformity**

CBRN PAPR Standard Development

Actions for CBRN PAPR Concept Development

- **Revise and post CBRN PAPR Concept**
- **Continue Stakeholder Discussions on Concept**
- **Development/Benchmark Testing**
 - **Breathing Performance Testing**
 - **Breathing Machine @ Ambient Conditions**
 - **99.97% Efficiency Particulate Testing**
 - **High Flow**
 - **Face Velocity**

CBRN PAPR Standard Development

Actions for CBRN PAPR Concept Development

- **Development/Benchmark Testing (Continued)**
 - **Gas & Vapor Capacity Testing at High Flow**
 - **CWA and LRPL**
 - **Environmental Conditioning**
 - **Battery Performance**
- **Next Public Meeting: September 2004 Time Frame**
- **Target Date for Standard: December 2004**

Information Docket CBRN PAPR Respirator

- Email: niocindocket@cdc.gov
- Fax: (513) 533-8285
- Phone: (513) 533-8303
- NPPTL Web Site: <http://www.cdc.gov/niosh/npptl>
- Mail:
NIOSH Docket Office
Robert A. Taft Laboratories, M/S C 34
PAPR – NIOSH 010
4676 Columbia Parkway
Cincinnati, OH 45226